



### Reliable

Exact measured values are important for smooth operation

### Cost effective

Reliable measurement ensures safe and efficient loading and unloading, so that these ships have a longer uptime

### User friendly

Maintenance free operation thanks to non-contact measurement



## Hopper

### Level measurement in the hopper of the trailing suction dredger

The hopper contains a mixture of sand, gravel and water. This mixture is collected by one or two suction pipes and drag heads that move over the seabed. The water flows out through so-called overflows and sand and gravel remain and are transported to an end destination for creating new land, or to be used as a supplementary material or building material. Accurate measurement of filling height, to determine the exact volume of displaced material, is important for smooth operation.

[More details](#)



### VEGAPULS C 23

Level measurement with non-contact radar in the hopper

- Precise measurement close to the bottom
- Reliable measured values unaffected by foam and heavy weather conditions
- No false echoes from installations like frames or pipes thanks to narrow beam angle

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### VEGAMET 342

External controller for 4 ... 20 mA HART sensors

- Power supply, value display, relay contacts and sensor adjustment on the bridge
- Easy-to-read display with plain text and graphics
- Simple adjustment via Bluetooth and PACTware or app for smartphone or tablet

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**VEGAPULS C 23**[Show Product](#)**VEGAMET 342**[Show Product](#)**Measuring range - Distance**

30 m

**Process temperature**

-40 ... 80 °C

**Process pressure**

-1 ... 3 bar

**Accuracy**

± 2 mm

**Frequency**

80 GHz

**Beam angle**

4°

**Materials, wetted parts**

PVDF

**Threaded connection**

G1, 1 NPT, R1

**Protection rating**

IP66/IP68 (3 bar), Type 6P

**Output**

4 ... 20 mA/HART

Modbus

SDI-12

**Protection rating**

IP20/IP40

**Input**

2 x 4 ... 20 mA sensor input

**Output**

3 x operating relay

1x failure relay (instead of operating relay)

2x 0/4 ... 20 mA current output

**Ambient temperature**

-20 ... 60 °C